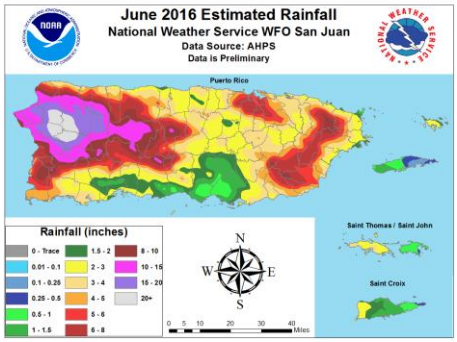
NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) San Juan, Puerto Rico
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH June YEAR 2016
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE Amaryllis Cotto - Met Intern Odalys Martinez - FIC DATE 07/15/2016

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☐ An X inside this box indicates that no flooding occurred within this hydrologic service area.

Summary: A fair and mainly stable weather pattern prevailed across the local islands during most of the month. Diurnal and locally induced showers and thunderstorms were observed across sections of western PR during most of the afternoons, producing locally heavy rainfall amounts. There were, however, some instances throughout the month when more widespread activity was observed due to different features. On June 1st and 2nd, an upper level trough lingered across the western Caribbean, bringing surges of abundant low-level moisture across the region and aiding in the formation and widespread coverage in the shower and thunderstorm activity, mainly across PR. Both June 7th-8th and June 19th- 20th featured the passage of a tropical wave. Although the most intense part of these tropical waves passed to the south of the forecast area, areas of showers and thunderstorms still impacted the islands. Lastly, on June 21st -22nd a low-level easterly perturbation affected the islands producing several periods of showers.

Based on the Cooperative Observer Network Data (COOP), 79 % of the normal rainfall was observed across Puerto Rico. Preliminarily, an average rainfall total of 3.58 inches was measured, which is 0.95 inches below normal (Table 1). Across St. Croix, an average rainfall total of 1.22 was observed, which is also below the normal rainfall (Table 1). At the primary climatological data sites, a rainfall deficit of 1.45 and 0.21 inches was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST) respectively.



Please also see June's Climate Report: (http://www.srh.noaa.gov/images/sju/climo/monthly_reports/2016/June2016.pdf).

River and Drought Conditions: Based on the 28-day average streamflow from the USGS, the majority of streamflows are running between the 25th and the 90th percentile, which is in the normal to above normal range. A few outliers are observed across Central Puerto Rico with streamflows below the normal range. Enough rain has fallen during June in order to prevent deterioration in drought conditions, but not enough to justify additional improvement. The D0/D1 still persists across south-central Puerto Rico.

Water Supply: Lake levels at water supply reservoirs continue at optimum levels.

Flood Conditions:

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	0
Flood Warnings (SJUFLWSJU)	0
Flash Flood Warnings (SJUFFWSJU)	0
Flash Flood Statements (SJUFFSSJU)	0
Urban/Small Stream Flood Advisories (SJUFLSSJU)	21

General Hydrology Information: Sea Surface Temperature (SST) anomalies in El Niño region are currently near neutral and most of the models are suggesting La Niña likely to peak by October-November-December (OND) 2016. Although global models show limited signal during JAS, there is a slight shift in probabilities to near to above normal rainfall for OND. Therefore as we moves into a potentially wetter period, the chance of wet spells and flooding increases.